

**Notice of Allowability**

Application No.

10/010,800

Examiner

Kiet Doan

Applicant(s)

LEE, JAE-DUCK

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 08/13/2007.
2. ☒ The allowed claim(s) is/are 1, 4 and 7.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Musella at (516) 228-3565 on 10/18/2007.

The examiner amendment as follow:

**Claims 2, 3, 5, 6** are cancelled.

**Claim 1.** A method for performing a hand hand-off in a cellular mobile communication system, the method comprising the steps of:

setting an area of services covered with a frequency assignment (FA) of a plurality of FAs of a base station currently engaged in communication with a mobile communication terminal, to be a boundary cell, the FA is only included in FAs of the base station not in adjacent stations of the base station;

entering into the boundary cell by the mobile communication terminal during communication;

receiving a candidate frequency search request message, commanding the mobile communication terminal to search common FAs of only adjacent stations, except the base station currently engaged in communication, from a Base Station Controller (BSC); and

searching FAs of only adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal in response to the command, so as to determine a target FA, with which the mobile communication terminal is to perform the hard hand-off;

wherein the target FA is determined by the mobile communication terminal through searching common FAs of adjacent stations to perform the hard hand-off therewith;

wherein determination of the target FA includes a step of recognizing that the mobile communication terminal is currently engaged in communication in the boundary cell, and commanding the mobile communication terminal to search FAs of the adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal by means of a base station controller (BSC), which controls the hand-off of the mobile communication terminal.

**Claim 4.** A method for performing a hard hand-off in a cellular mobile communication system, the method comprising the steps of:

setting an area of services covered with a FA of a plurality of FAs of a base station currently engaged in communication with an mobile communication terminal, to be a boundary cell, the FA is only included in FAs of the base station not in adjacent stations of the base station;

establishing a call in the boundary cell by the mobile communication terminal to initiate communication;

receiving a candidate frequency search request message commanding the mobile communication terminal to search common FAs of only adjacent stations, except the base station currently engaged in communication, from a BSC; and

searching FAs of only adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal in response to the command, so as to determine a target FA, with which the mobile communication terminal is to perform the hard hand-off;

wherein the target FA is determined by the mobile communication terminal through searching common FAs of adjacent stations to perform the hard hand-off therewith;

wherein determination of the target FA includes a step of recognizing that the mobile communication terminal is currently engaged in communication in a boundary cell, and commanding the mobile communication terminal to search FAs of the adjacent stations excluding the base station currently engaged in communication with said mobile communication terminal by means of a base station controller (BSC), which controls the hand-off of the mobile communication terminal.

***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance:

Claims 1, 4 and 7 are allow accordingly to the remarks file on 06/14/2007 and further examiner amendment in specific detail.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

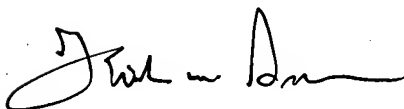
**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863.

The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan  
Patent Examiner

JEAN GELIN  
PRIMARY EXAMINER

